

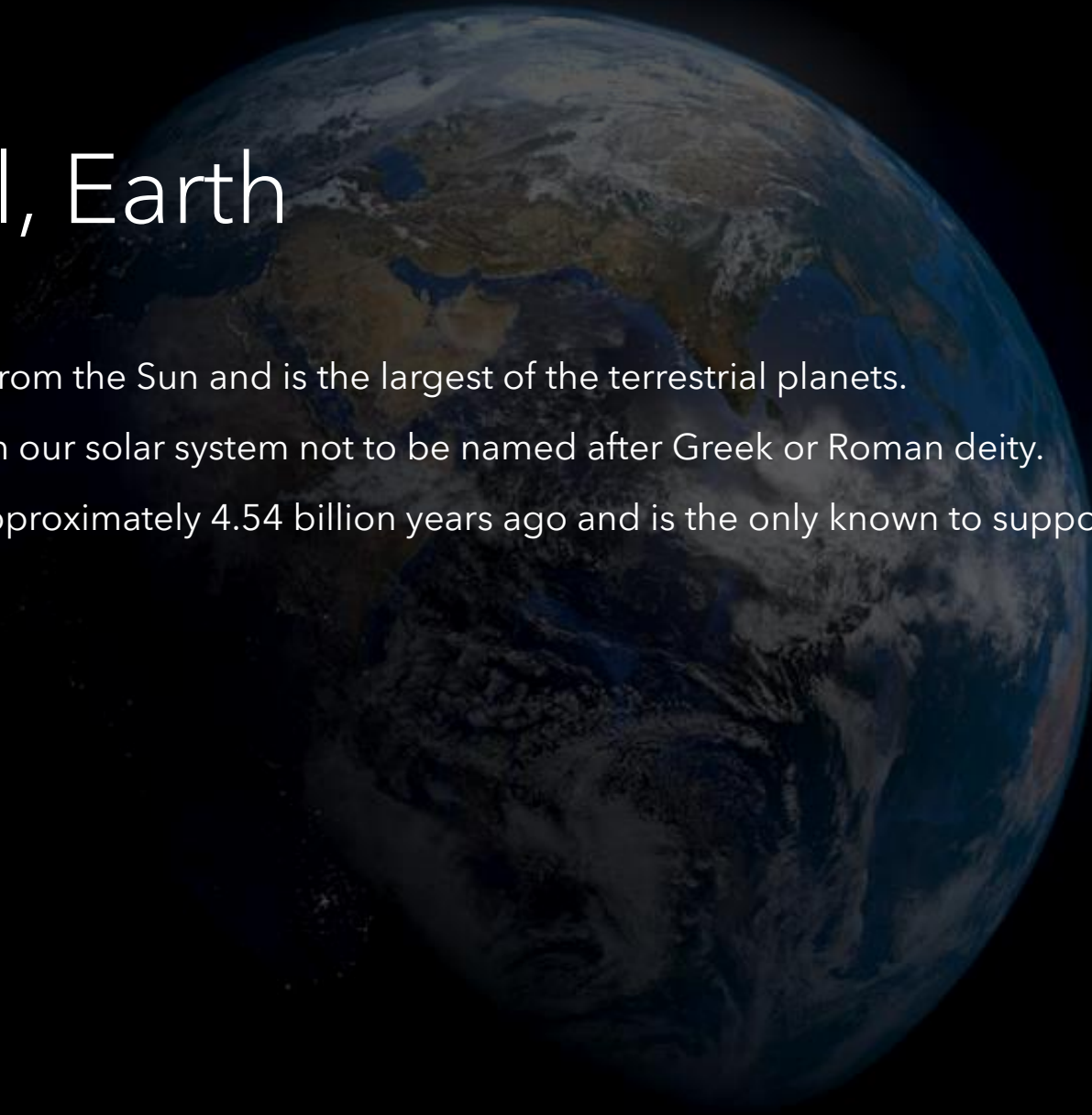


SPACE!

All About Space!

First Of All, Earth

- Earth is the third planet from the Sun and is the largest of the terrestrial planets.
- Earth is the only planet in our solar system not to be named after Greek or Roman deity.
- The Earth was formed approximately 4.54 billion years ago and is the only known to support life.



The moon!

- The moon is the Earth's only natural satellite and the 5th largest moon in the solar system .

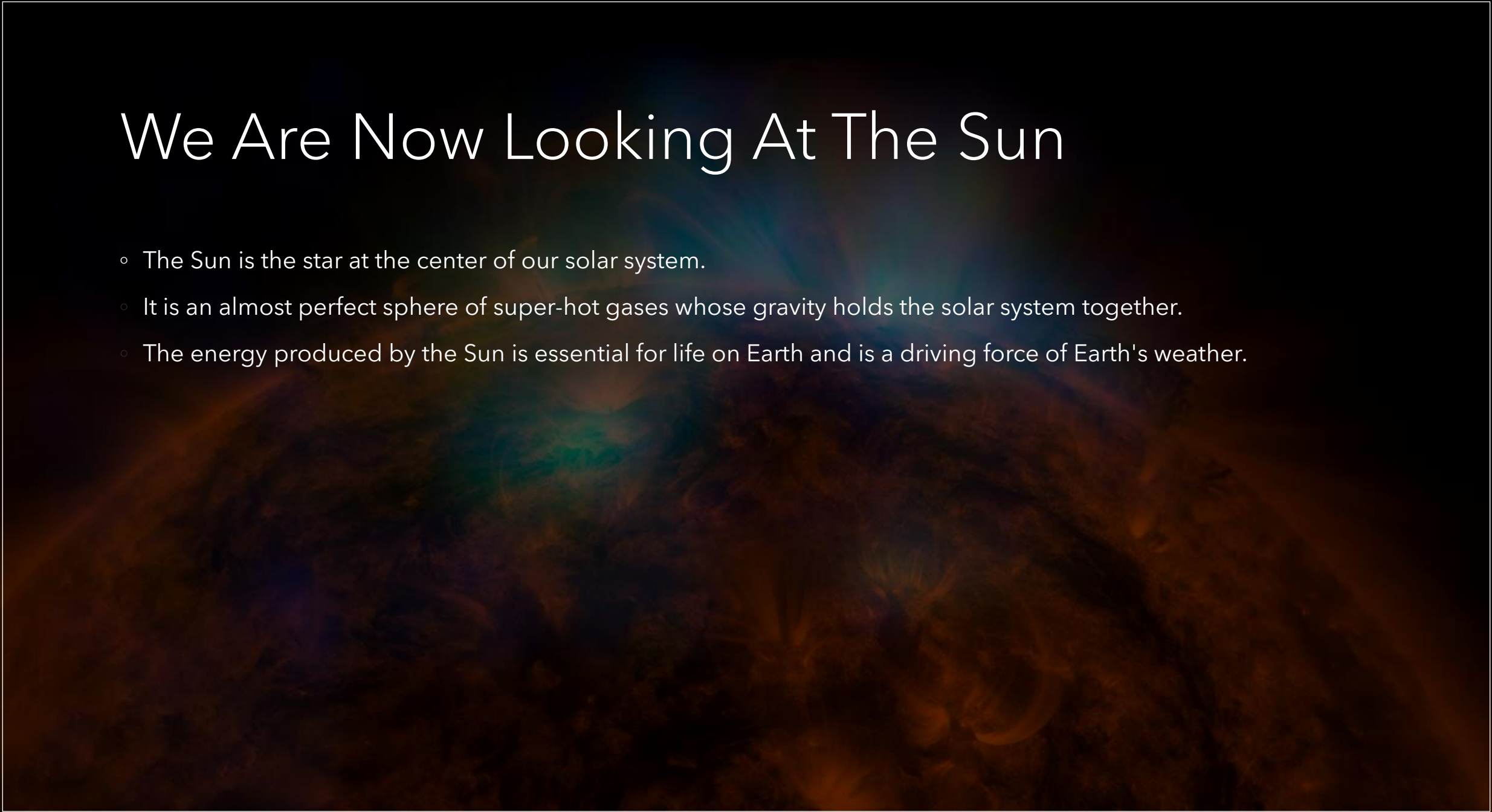
The moon presence helps stabilize our planet's wobble and moderate our climate.

The moon's distance from Earth is about 240,000 miles (385,000 km).

The moon has a very thin atmosphere called an exosphere.

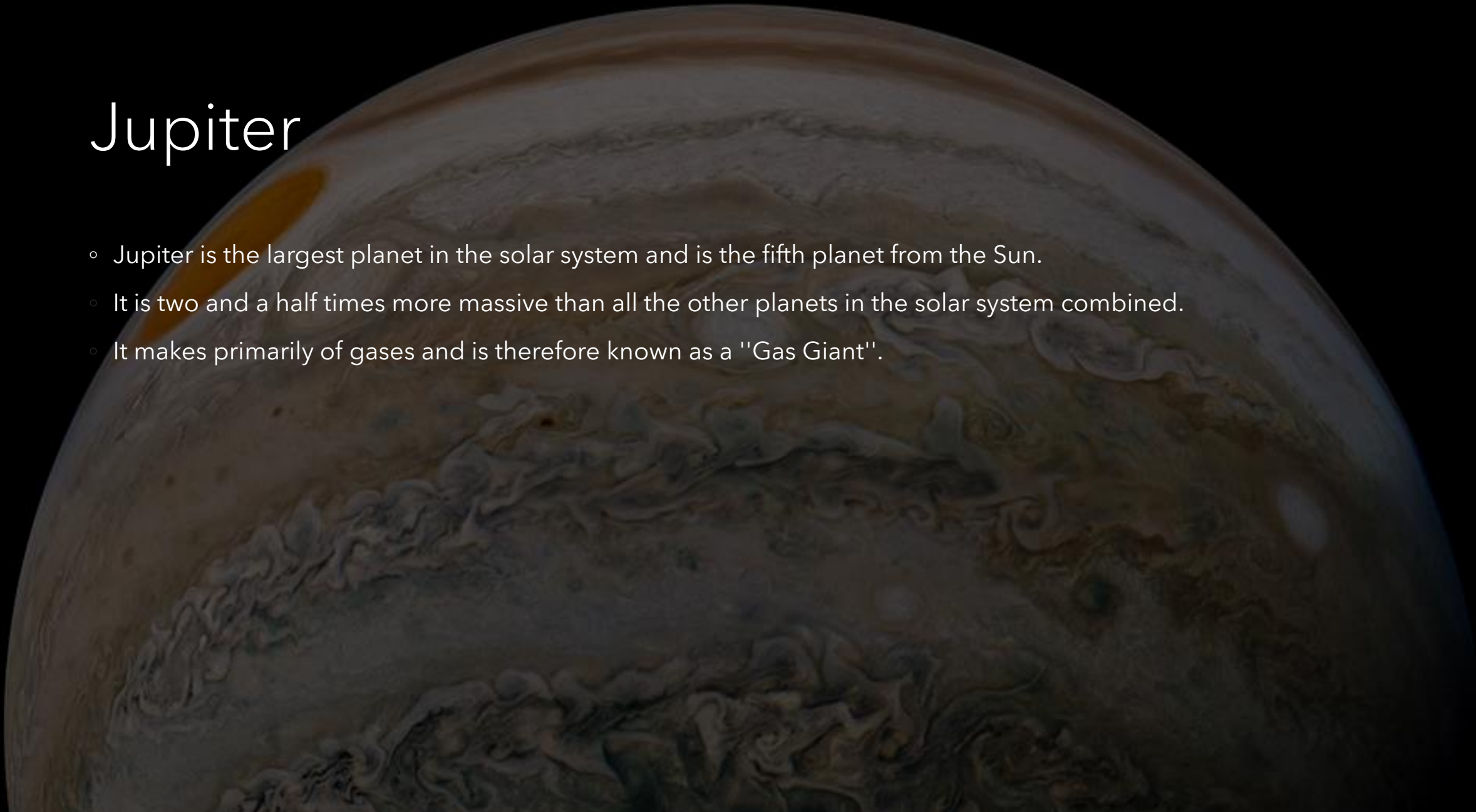
We Are Now Looking At The Sun

- The Sun is the star at the center of our solar system.
- It is an almost perfect sphere of super-hot gases whose gravity holds the solar system together.
- The energy produced by the Sun is essential for life on Earth and is a driving force of Earth's weather.



Jupiter

- Jupiter is the largest planet in the solar system and is the fifth planet from the Sun.
- It is two and a half times more massive than all the other planets in the solar system combined.
- It makes primarily of gases and is therefore known as a "Gas Giant".





DWARF PLANETS!

We Are Now Looking At Dwarf Planets!

Pluto

- Discovered in 1930, Pluto is the second dwarf planet to the sun and was at one point classified as the ninth planet.
- Pluto is the largest dwarf planet but only the second most massive, with Eris being the most massive.

Ceres

- Ceres is the closest dwarf planet to the sun and is located in the asteroid belt, between Mars and Jupiter, making it the only dwarf planet in the inner solar system.
- Ceres is the smallest of the bodies currently classified as dwarf planets with a diameter of 950km.



Haumea

- Haumea is the third closest dwarf planet to the Sun and is unique in its elongated shape making it the least spherical of the dwarf planets.



Makemake!

- Makemake is the second furthest dwarf planet from the Sun and is the third largest dwarf planet in the solar system.
- Makemake was discovered on March 31st 2005 and was recognized as a dwarf planet by the International Astronomical Union [IUA] in July 2008.
- Until April 2016, Makemake was thought to be the only one of the outer dwarf planets to not have any moons.
- It is a perfect sphere.



Eris!

- Eris is the most distant dwarf planet from the Sun and has the greatest mass.
- Eris is the second largest dwarf planet [very close second to Pluto] and at one point was considered for the position of 10th planet.
- Eris's discovery promoted discussion.
- It has an average of -350 °C.

Now We Are Looking Some Of The Galaxies!

- On The Next Slide!



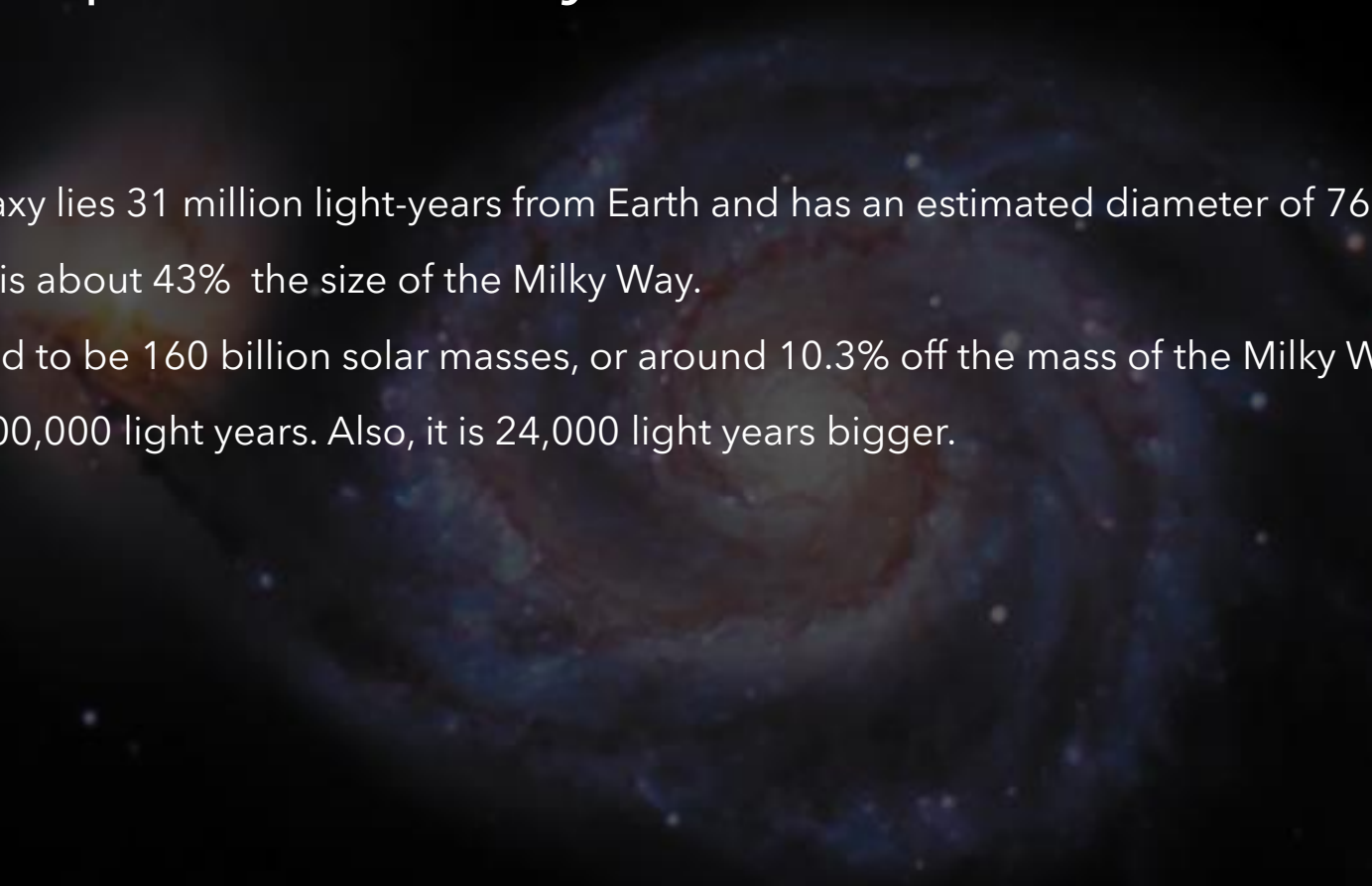
The Whirlpool Galaxy!

The Whirlpool Galaxy lies 31 million light-years from Earth and has an estimated diameter of 76,000 light-years.

Overall the Galaxy is about 43% the size of the Milky Way.

Its mass is estimated to be 160 billion solar masses, or around 10.3% off the mass of the Milky Way Galaxy

The Milky Way is 100,000 light years. Also, it is 24,000 light years bigger.

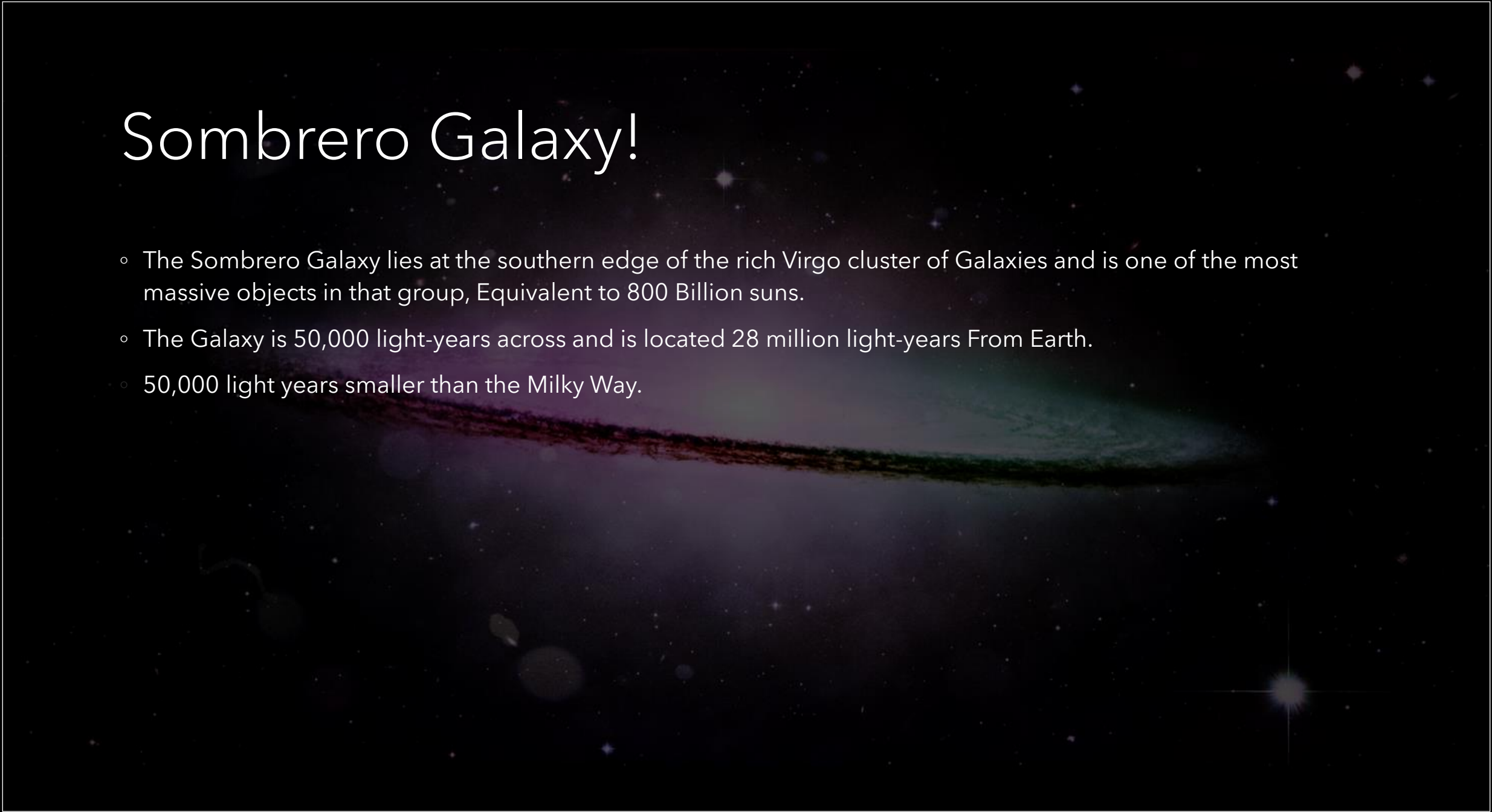


Andromeda Galaxy!

- The Andromeda Galaxy [M31] is the closest large galaxy to the Milky Way and is one of a few galaxy's that can be seen unaided from the Earth.
- In approximately 4.5 billion years the Andromeda Galaxy and the Milky Way are expected to collide and the result will be a giant elliptical galaxy.
- Andromeda is accompanied by 14 dwarf galaxy's, including M23, M11O and possibly MM3 [The Triangulum Galaxy].

Sombrero Galaxy!

- The Sombrero Galaxy lies at the southern edge of the rich Virgo cluster of Galaxies and is one of the most massive objects in that group, Equivalent to 800 Billion suns.
- The Galaxy is 50,000 light-years across and is located 28 million light-years From Earth.
- 50,000 light years smaller than the Milky Way.



The Milky Way Galaxy!

- The Milky Way is warped and has an Invisible halo And has over 200 billion stars Also is really dust and gassy
- It was made from different galaxies but you can't take pictures of it!
- Also there is a black hole at the center of the Milk Way And it's almost as old as the Universe itself

Combining. The black hole's name is Sagetearius A

The Triangulum Galaxy!

- The Triangulum Galaxy, also known as M33, is one of the closest spiral galaxy's to the Milky Way.
- It lies 3 million light-years away, in the constellation Triangulum.
- The closest spiral is the Andromeda Galaxy at a distance of 2.5 million light-years.
- All three are the Local Group, a collection of about 50 galaxy's in our neighbourhood of space of space.

The Magellanic Galaxy!

- The Magellanic Galaxy is a large cloud
- It is a Nebulea then.



FINALLY, THE PINWHEEL GALAXY!

The Pinwheel Galaxy in the constellation Ursa Major [The Greater Bear] is a "Grand Design" spiral, meaning that it has well-defined spiral arms and dust lanes that extend all the way around the body of the galaxy.

It is a
spiral
then .

All About The Universe!

- On The Next Slide!



Nebulae Universe!

- A Nebulae is a cloud of gas and dust in interstellar space.
- Every Nebulae contains hydrogen and helium, plus a mixture of other gases.
- There are several types of nebulae [plural of Nebula]: molecular clouds [also known as HII regions because they are mainly hydrogen], dark nebulae, supernova remnants, and planetary Nebulae.
- Our galaxy has many Nebulae, and astronomers has found these clouds in other galaxy's, as well.
- Like the Magellanic Galaxy.

Stars!

- There are many different types of stars all of the stars we see in the sky are brighter and bigger than our Sun. Most stars travel in clusters .
- Dwarf stars live longer than big, powerful stars.
- We can only see about 2,000 stars in the sky .
- The biggest is Stevenson 2-18. Then, UY Scuti.. Then , VY Canis Majorus.

Black Holes!

- Black Holes are among the strangest things in the universe
- They are massive objects - collections of mass - with gravity so strong that nothing can escape, not even light.
- The most common types of Black Holes are the stellar-mass and the supermassive Black Holes.
- Stellar-mass Black Holes are created when massive stars explode, leaving behind a black hole with the mass of just a few suns.
- Supermassive Black Holes exist in the hearts of galaxy's and usually contain the mass equivalent of millions of suns.

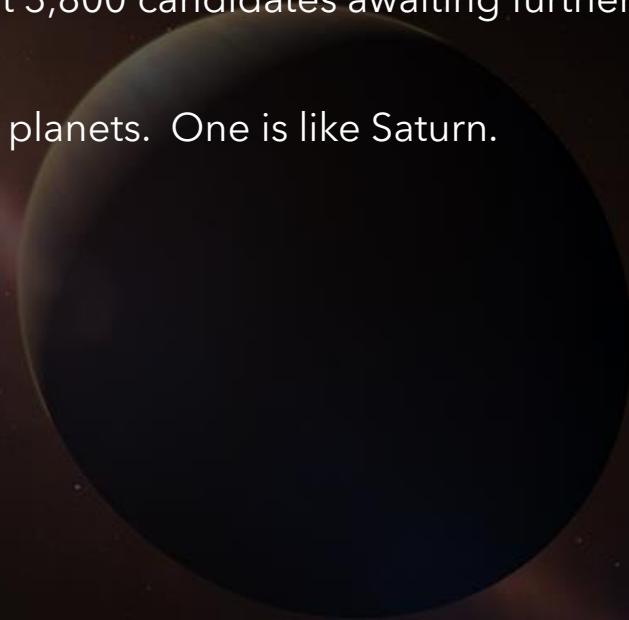
Exoplanets Universe!

Exoplanets, also called "Extrasolar Planets" are World's orbiting the Stars

Thousand's of possible Exoplanets have been found through ground-based and space-based observatories

More than 4,000 Exoplanets have been confirmed; with almost 3,800 candidates awaiting further observations so that astronomers can be sure that they are planets

Astronomers estimate that there could be trillions of planets of planets. One is like Saturn.





MORE PLANETS TO LEARN :/

Don't Worry, Were Almost Done!

Neptune!

- Neptune is the eighth planet from the Sun, making it the most distant in the solar system.
- This gas giant may have formed much closer to the Sun in the early solar system history before migrating out to its current position.

It is the windiest planet!

Uranus!

- Uranus is the seventh planet from the Sun.
- It is not visible to the naked eye, and became the first planet discovered with the use of a telescope
- Uranus is tipped over on its side with an axial tilt of 98 degrees
- It is often described as "rolling around the Sun on its side." It's degree is 98.30 at least.

Mercury!

- Mercury is the closest planet to the Sun and due to its proximity it is not easily seen during twilight.

For every two orbits of the Sun, Mercury completes three rotations about its axis and up until 1965 it was thought that the same side of Mercury constantly faced the Sun.

Thirteen times a century Mercury can be observed from the Earth passing across the face of the Sun in an event called the transit, the next will occur on the 9th May 2016. It is the 2nd hottest and the smallest aswell.

Venus!

- Venus is the second planet from the Sun and is the second largest terrestrial planet.
- Venus is sometimes referred to as the Earth's sister planet due to their similar size and mass.
- Venus is named after the Roman goddess of love and beauty. It is the hottest and 6,039 in radius.

Finally, We Are Looking At The Moons!

- In The Next Slide!



Lo

- Io is the innermost and is the second smallest of the four Galilean moons.
- It was discovered, along with Europa, Ganymede and Callisto by Galileo Galilei in 1610.

It is the strangest moon in
the Solar System.



Titan!

The Titan moon was discovered on March 25th 1665 and is like an icy moon

The diameter. 3,200 miles(5,149km's) .

Mass. 1.8 times Earth's moon. It is the only moon with an atmosphere. WOW!!

Europa

- Europa is the smallest of Jupiter's Galilean moons and the second closest, however it is still the sixth largest moon in the solar system
- Europa is known for being one of the first World's a subsurface water ocean was hypothesised for.
It is slightly smaller than the moon.

Rhea!

Rhea is the second largest moon to Saturn, but with a mean radius of 475 miles (764 Kilometers) it is less than a third the radius of Saturn's largest moon , Titan. Rhea is a small, cold, airless body that is very similar to sister moon's. Dione and Tethys.

